

Title (en)
SELECTIVE LASER SINTERING PROCESS (SLS) FOR PRODUCING ANTIBIOTIC-ELUTING MEDICAL IMPLANTS

Title (de)
SELEKTIVES LASERSINTERVERFAHREN (SLS) ZUR HERSTELLUNG VON ANTIBIOTIKA-FREISETZENDEN MEDIZINISCHEN IMPLANTATEN

Title (fr)
PROCÉDÉ DE FRITTAGE AU LASER SÉLECTIF (SLS) POUR LA PRÉPARATION D'IMPLANTS MÉDICAUX À ÉLUTION D'ANTIBIOTIQUES

Publication
EP 3122393 B1 20200422 (EN)

Application
EP 15768793 A 20150320

Priority
• US 201461969945 P 20140325
• CA 2015050211 W 20150320

Abstract (en)
[origin: WO2015143553A1] An antibiotic-eluting article for implantation into a mammalian subject, produced by an additive manufacturing process wherein a polymeric material is concurrently deposited with a selected antibiotic. The additive manufacturing process may be a selective laser sintering process or a selective laser melting process or a selective heat sintering process or an electron beam melting process. The antibiotic-eluting article may be temporary or permanent orthopaedic skeletal component, an orthopaedic articulating joint replacement component, and/or an external hard-shell casing for an implantable device. One or more bone-growth-promoting compositions may be concurrently deposited with the polymeric material. The implantable device may be a cardiac pacemaker, a spinal cord stimulator, a neurostimulation system, an intrathecal drug pump for delivery of medicants into the spinal fluid, and infusion pump for delivery of chemotherapeutics and/or anti-spasmodics, an insulin pump, an osmotic pump, and a heparin pump.

IPC 8 full level
A61L 27/44 (2006.01); **A61K 9/00** (2006.01); **A61K 31/7036** (2006.01); **A61K 38/14** (2006.01); **A61K 47/30** (2006.01); **A61L 27/54** (2006.01); **A61P 31/04** (2006.01)

CPC (source: EP US)
A61C 13/0018 (2013.01 - EP US); **A61C 13/0019** (2013.01 - EP US); **A61K 9/0024** (2013.01 - EP US); **A61K 31/7036** (2013.01 - EP US); **A61K 38/14** (2013.01 - EP US); **A61K 47/32** (2013.01 - EP US); **A61K 47/34** (2013.01 - US); **A61K 47/38** (2013.01 - EP US); **A61L 27/14** (2013.01 - EP US); **A61L 27/18** (2013.01 - US); **A61L 27/34** (2013.01 - EP US); **A61L 27/54** (2013.01 - EP US); **A61N 1/00** (2013.01 - US); **A61P 31/00** (2017.12 - EP); **A61P 31/04** (2017.12 - EP); **B29C 35/0805** (2013.01 - US); **B29C 35/0866** (2013.01 - US); **B29C 64/153** (2017.07 - EP US); **B33Y 10/00** (2014.12 - US); **B33Y 70/00** (2014.12 - EP US); **B33Y 80/00** (2014.12 - US); **A61B 2017/00526** (2013.01 - US); **A61B 2017/00889** (2013.01 - US); **A61F 2002/30968** (2013.01 - US); **A61F 2002/3097** (2013.01 - US); **A61F 2002/30985** (2013.01 - US); **A61F 2240/001** (2013.01 - EP US); **A61L 2300/102** (2013.01 - EP US); **A61L 2300/404** (2013.01 - EP US); **A61L 2300/406** (2013.01 - EP US); **A61L 2430/02** (2013.01 - EP US); **A61L 2430/12** (2013.01 - US); **A61L 2430/24** (2013.01 - EP US); **A61M 5/14276** (2013.01 - EP US); **A61M 2205/0205** (2013.01 - US); **A61M 2207/00** (2013.01 - US); **B29C 2035/0838** (2013.01 - US); **B29C 2035/0877** (2013.01 - US); **B29K 2067/046** (2013.01 - US); **B29K 2105/251** (2013.01 - US); **B29K 2995/0037** (2013.01 - US); **B29L 2031/7532** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015143553 A1 20151001; AU 2015234581 A1 20161006; AU 2015234581 B2 20180621; CA 2943416 A1 20151001; CA 2943416 C 20191029; CN 106456835 A 20170222; EP 3122393 A1 20170201; EP 3122393 A4 20171129; EP 3122393 B1 20200422; IL 247960 A0 20161130; JP 2017508565 A 20170330; JP 6626834 B2 20191225; US 10406263 B2 20190910; US 2017095596 A1 20170406

DOCDB simple family (application)
CA 2015050211 W 20150320; AU 2015234581 A 20150320; CA 2943416 A 20150320; CN 201580016202 A 20150320; EP 15768793 A 20150320; IL 24796016 A 20160921; JP 2016559324 A 20150320; US 201515127916 A 20150320